

## REMARKS

Claim 1-29 and 35-48 are pending. Claims 1, 15, and 47 are in independent form.

In the action mailed May 22, 2007, claims 1 and 15 were rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,724,571 to Woods (hereinafter "Woods") and U.S. Patent Publication No. 2003/0115191 to Copperman et al. (hereinafter "Copperman").

As amended, claim 1 relates to a computer-implemented method that includes receiving, from a user, a request for information that includes a definition of a concept list comprising an origin concept, a relationship between the origin concept and an evaluated concept, and a distance representing a strength of the relationship between the origin concept and the evaluated concept, and a target scope that characterizes a document region to which the concept list is to be applied, receiving a definition of an extraction rule, determining a target score for the document regions of the article, applying the extraction rule to the article to determine an extract from the article, and outputting the extract in response to the request for information. The extraction rule definition comprises an extraction scope that characterizes a document region to be extracted. The score represents how well the document regions relate to the concept list. The application of the extraction rule is based on the determined target score.

Claim 15 relates to an article that includes one or more computer-readable data storage media containing program code operable to cause one or more machines to perform operations. The operations are related to the activities recited in claim 1.

The rejections of claims 1 and 15 are based on the contention that the subject matter recited therein would have been obvious to one of ordinary skill based on Woods and Copperman. Applicant respectfully disagrees.

In this regard, claims 1 and 15 both relate to receiving and responding to requests for information from a user that include a definition of a concept list. The receipt of such requests is described, e.g., in para. [0016] of the specification, which describes how a concept set processor 126 can allow a user to create concept sets. Neither Woods and Copperman describe or suggest that such requests for information be received and responded to, especially where a concept list definition includes an origin concept, a relationship between the origin concept and an evaluated concept, and a distance representing a strength of the relationship between the origin concept and the evaluated concept, as recited in claims 1 and 15.

In this regard, Woods and Copperman both use concepts and concept networks to classify the documents in a corpus and then match the terms in a search query to the classified documents. For example, Woods describes that a semantic network of terms and concepts (i.e., term/concept relationship network 110) can be constructed by analyzing a corpus of documents using a terminology analysis module. *See, e.g., Woods*, col. 5, line 7-14. This term/concept relationship network 110 is used to connect terms in a query with the text of the documents in the corpus. *See, e.g., id.* *See also id.*, col. 5, line 66-col. 7, line 56 (describing how the terms in a search query are matched to the classified documents).

As for Copperman, Copperman describes that documents or other content can be mapped by weighted tags to a knowledge map 200. *See, e.g., Copperman*, para. [0037]. Knowledge map 200 is a collection of taxonomies 210 in which concept nodes are connected by edges. *Id.* The documents in a corpus are assigned to particular concept nodes by a document classifier 445. *See, e.g., id.*, para. [0049]. Rather than matching the terms in a search query directly to these mapped documents, Copperman describes an intermediate step in which certain terms from a

user search query are “autocontextualized” by an autocontextualization engine 525.

Autocontextualization engine 525 matches text words or phrases from a user search query to concept nodes in a schema. *See, e.g., id.*, para. [0052]. Thus, topics in a search query are “spotted” based on the terms in the search query and assigned to concept nodes. *See, e.g., id.*, para. [0051]. The assigned concepts/topics are then matched to the mapped content, often through an iterative, guided process. *See, e.g., id.*, para. [0054]. *See also id.*, para. [0051] (describing that terms in a user query that are evidence of concepts are first extracted and then used as the basis for guided search routines).

Copperman's FIGS. 9A-9E illustrate one example of such an iterative, guided search process. *See, e.g., id.*, paras. [0081], [0017]-[0021]. As shown in, e.g., FIG. 9A, a textual search query is first received from a user. *See, e.g., id.*, para. [0081]. As shown in, e.g., FIG. 9C, the response to the search query can include results that match a “primary group feature” that was “spotted” in the terms of the search query, as well as “related features.” As best understood, Copperman's features are terms or phrases. *See id.*, para. [0052]. The “related features” can be used to narrow the scope of the search and reduce the number of documents “in play.” *See, e.g., id.*, paras. [0054], [0081]. In some instances, the text of a user query can match multiple “primary group features.” *See, e.g., id.*, para. [0077].

Applicant respectfully submits that neither Woods nor Copperman would lead one of ordinary skill to receive and respond to requests for information from a user that include a definition of a concept list, especially where a concept list definition includes an origin concept, a relationship between the origin concept and an evaluated concept, and a distance representing a strength of the relationship between the origin concept and the evaluated concept, as recited in

claims 1 and 15. As discussed above, Woods both begins and ends with the receipt of textual search queries from a user. Such textual search queries are not a concept list definition, and Woods would not lead one of ordinary skill to receive and respond to requests for information from a user that include a definition of a concept list, as recited.

As for Copperman, his iterative, guided search process also begins with the receipt of a textual search query. As with Woods, such a textual search query is not a request for information from a user that include a definition of a concept list. Although Copperman describes that such textual search query can be autocontextualized, whatever topics or concepts that are spotted during such an autocontextualization are not received from a user. Rather, they are automatically generated by an autocontextualization engine 525.

The only other potential request for information received from a user in Copperman are the “related features” received during the remainder of Copperman’s iterative, guided search process. However, the receipt of user selections of one or more “related features” does not constitute the receipt of a concept list, as recited. To begin with, the terms of the initial search query are already assigned to concept nodes during “autocontextualization”—and hence subsequent user selections of related features are not part of a concept list definition that includes those initial search query terms.

Further, there is no reason to believe that the user selected “related features” are, by themselves, definitions of a concept list. As discussed above, as best understood, Copperman’s features are terms or phrases. There is no reason to believe that the “related features” (e.g., related terms or phrases) are part of a concept list definition as recited in claims 1 and 15.

Instead, the user selected "related features" also appear to be stand-alone terms or phrases that simply narrow the result set that is responsive to the search.

Finally, even if one of ordinary skill were to consider Copperman's related features to be part of a single definition that included the terms of the initial search query, this single definition would still not be a concept list definition. In particular, the recited concept list definition includes an origin concept, a relationship between the origin concept and an evaluated concept, and a distance representing a strength of the relationship between the origin concept and the evaluated concept. However, there is nothing in Copperman that describes that the strength of a relationship between an origin concept and an evaluated concept is somehow received in conjunction with the related features. Rather, the related features are understood to be received as shown, e.g., in Copperman's FIGS. 9A-9E.

In the Office action mailed May 22, 2007, the rejections of former claims 1, 15, as well as the rejections of claims 37, 38, 42, and 43, pointed to various sections portions of Wood and Copperman as allegedly involving the strengths of relationships between origin concepts and evaluated concepts. However, the citations generally point to descriptions of how the documents in a corpus can be classified by Woods and Copperman and do not relate to the receipt and response to search queries. Moreover, the present claims recite that such strengths are included in a concept list definition received in a request for information from a user. Neither Woods and Copperman describe the receipt of such strengths in a request for information from a user.

Since elements and/or limitations recited in claims 1 and 15 are neither described nor suggested by Woods and Copperman, one of ordinary skill would not arrive at the recited subject matter even if Woods and Copperman were combined. Accordingly, claims 1 and 15 are not

obvious to those of ordinary skill. Applicant respectfully requests that the rejections of claims 1, 15, and the claims dependent therefrom be withdrawn.

Claim 47 relates to a computer-implemented method for extracting a subset of a document. The method includes receiving, from a user, a request for information that describes a combination of two or more concept lists, receiving a description of a document region targeted for extraction, accessing a document, based on the target definition and the document regions targeted for extraction, extracting one or more regions of the accessed document, and making the extracted regions available for output in response to the request for information. Each concept list is defined by an origin concept, a relationship between the origin concept and an evaluated concept, and a distance representing a strength of the relationship between the origin concept and the evaluated concept. The two or more concept lists are combined using an operation to define a target definition that is to be detected.

Woods and Copperman neither describe nor suggest that a request for information that describes a combination of two or more concept lists be received, as recited in claim 47. In this regard, as discussed above, Woods exclusively receives search terms from a user in requests for information. Copperman initially receives textual search queries from a user. Through autocontextualization, topics or concepts that are related to the text are spotted. Further, selections of “related features” can be received during Copperman’s iterative, guided search process. There is no reason to believe that Copperman’s “related features,” alone or in combination with a textual search query, is a concept list, much less a combination of two or more concept lists, as recited in claim 47. For example, there is nothing in Copperman that

describes that the strength of a relationship between an origin concept and an evaluated concept is somehow received.

Since elements and/or limitations recited in claim 47 are neither described nor suggested by Woods and Copperman, one of ordinary skill would not arrive at the recited subject matter even if Woods and Copperman were combined. Accordingly, claim 47 is not obvious to those of ordinary skill. Applicant respectfully requests that the rejections of claim 47 and the claims dependent therefrom be withdrawn.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Please apply the Petition for Extension of Time fee, along with any other charges or credits, to deposit account 06-1050.

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Respectfully submitted,

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